

1/5

## SEQUENCE LISTING

&lt;110&gt; TOYOBO RESEARCH CENTER CO., LTD.

&lt;120&gt; Hyaluronic Acid Synthase

&lt;130&gt; P04-78

&lt;150&gt; JP2003-204896

&lt;151&gt; 2003-07-31

&lt;150&gt; JP2004-89135

&lt;151&gt; 2004-03-25

&lt;160&gt; 6

&lt;170&gt; PatentIn version 3.1

&lt;210&gt; 1

&lt;211&gt; 1707

&lt;212&gt; DNA

&lt;213&gt; Chlorella virus

&lt;400&gt; 1

atgggtaaaa atataatcat aatgggtttcg tggtagacca tcataacttc aaatctaadc	60
gcgggttgag gagcctctct aatcttggct ccagcaatta ctgggtatat tctacattgg	120
aatattgctc tctcgacaat ctggggagta tcagcttatg gtattttcgt ttttggtttt	180
ttccttgcac aagttttatt ttcagaactg aacaggaaac gtcttcgcaa gtggatttct	240
ctcagaccta agggttggaa tgatgtccgt ttggctgtga tcattgctgg ataccgcgaa	300
gatccctata tgttccaaaa gtgtctcgag tcagtgcgtg actctgacta cggtaacgtt	360
gctcgtctca tttgtgttat tgacggcgat gacgacgtg atatgaagat gtccgatgtt	420
tacaagacga tctacaacga taatatcaag aagccccgag ttgtcttgtg tgagtcagac	480
gacaaggaag gtgaacgcat cgactctgat ttctctcgcg acatttgtgt tctccagcct	540

caccgtggca agagggagtg tctctatact ggtttccaac ttgcaaagat ggaccccagt	600
gtcaacgccg tcgttttgat tgacagcgat actgttctcg agaaggatgc tattctggaa	660
gttgtatacc cacttgcatg cgatcctgag atccaagccg tcgcaggtga gtgtaagatt	720
tggaacacag acactctttt gagtcttctc gtcgcttggc ggtactattc tgcgttttgt	780
gtggagagga gtgcccagtc ttttttcagg actgttcagt gcgttggggg cccgctgggt	840
gcctacaaga ttgatatcat taaggagatt aaggaccctt ggatttccca gcgctttctt	900
ggtcagaagt gtacttacgg tgacgaccgc cggctaacca acgagatctt gatgcgtggt	960
aaaaaggttg tgttcactcc atttgctggt ggttggtctg acagtccgac caatgtgttt	1020
cgatacatcg ttcagcagac ccgctggagt aagtcgtggt gccgcgaaat ttggtacacc	1080
ctcttcgccg cgtggaagca cggtttgtct ggaatttggc tggcctttga atgtttgtat	1140
caaattacat acttcttctt cgtgatttac ctcttttctc gcctagccgt tgaggccgac	1200
cctcgtcccc agacagccac agtgattgtg agcaccacgg ttgcattgat taagtgtggg	1260
tatttttcat tccgagccaa ggatattcgg gctttttact ttgtgcttta tacatttggt	1320
tactttttct gtatgattcc ggccagggtt actgcaatga tgacgctttg ggacattggc	1380
tggggtactc gcggtggaaa cgagaagcct tccgttgga cccgggtcgc tctgtgggca	1440
aagcaatata tcattgcata tatgtggtgg gccgcggttg ttggcgctgg agtttacagc	1500
atcgccata actggatggt cgattggaat tctctttctt atcgttttgc tttggttggt	1560
atttgttctt acattgtttt tattactatt gtgctggtga tttatttcac cggcaaaatt	1620
acgacttgga atttcacgaa gcttcagaag gagctaactg aggatcgtgt tctgtacgat	1680
gcatctacca atgctcagtc tgtgtga	1707

&lt;211&gt; 1707

&lt;212&gt; DNA

&lt;213&gt; Chlorella virus

&lt;400&gt; 2

atgggtaaaa atataatcat aatggtttcg tggtaacca tcataacttc aaatctaate	60
gcggttggag gagcctctct aatcttggct ccagcaatta ctggatatat tctacattgg	120
aatattgctc tctcgacaat ctggggagta tcagcttatg gtattttcgt ttttggtttt	180
ttccttgcac aagttttatt ttcagaactg aacaggaaac gtcttcgcaa atggatttct	240
ctcagaccta agggttggaa tgatgtccgt ttggctgtga tcattgctgg ataccgcgaa	300
gatccctata tgttccaaaa gtgtctcgag tcagtgcgtg actctgacta cggtaacgtt	360
gtcgtctca tttgtgttat tgacggcgat gacgacgtg atatgaagat gtccgatgtt	420
tacaagacga tctacaacga taatatcaag aagcccgagt ttgtcttggt tgagtcagac	480
gacaaggaag gtgaacgcat cgactctgat ttctctcgcg acatttgtgt tctccagcct	540
caccgtggca agaggagtg tctctatact ggtttccaac ttgcaaagat ggaccccagt	600
gtcaacgccg tcgttttgat tgacagcgat actgttctcg agaaggatgc tattctggaa	660
gttgataacc cacttgcatt cgatcctgag atccaagccg tcgcaggtga gtgtaagatt	720
tggaacacag acactctttt gagtcttctc gtcgcttggc ggtactattc tgcgttttgt	780
gtggagagga gtgcccagtc ttttttcagg actgttcagt gcgttggggg cccgctgggt	840
gcctacaaga ttgatattcat taaggagatt aaggaccctt ggatttccca gcgctttctt	900
ggtcagaagt gtacttacgg tgacgaccgc cggctaacca acgagatctt gatgcgtggt	960
aaaaagggtg tgttcactcc atttgctggt ggttggtctg acagtccgac caatgtgttt	1020
cgatacatcg ttcagcagac ccgctggagt aagtcgtggt gccgcgaaat ttggtacacc	1080
ctctttgccg cgtggaagca cggtttgtct ggaatttggc tggcctttga atgtttgtat	1140

caaattacat acttcttcct cgtgatttac ctcttttctc gcctagccgt tgaagccgac 1200  
 cctcgctccc agacagccac agtgattgtg agcaccacgg ttgcattgat taagtgtggg 1260  
 tatttttcat tccgagccaa ggatattcgg gctttttact ttgtgcttta tacatttggt 1320  
 tactttttct gtatgattcc ggccagggtt actgcaatga tgacgctttg ggacattggc 1380  
 tggggtactc gcggtggaaa cgagaagcct tccgttggca cccgggtcgc tctgtgggca 1440  
 aagcaatata tcattgcata tatgtggtgg gccgcggttg ttggcgctgg agtttacagc 1500  
 atcgccata actggatggt cgattggaat tctctttctt atcgttttgc tttggttggt 1560  
 atttgttctt acattgtttt tattactatt gtgctggtga tttatttcac cggcaaaatt 1620  
 acgacttgga atttcacgaa gcttcagaag gagctaatac aggatcgtgt tctgtacgat 1680  
 gcatctacca atgctcagtc tgtgtga 1707

<210> 3  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer

<400> 3  
 gccgccgcat atgggtaaaa atataatcat aatggtttcg 40

<210> 4  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer

<400> 4

cttgcagtct agatcacaca gactgagcat tggtag

36

<210> 5

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 5

gtgtggaatt taaagcggat aacaatttca cacagg

36

<210> 6

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 6

gggcgaattg gagctccacc gcgg

24